# Industry Webinar – Draft Standards COM-003-1 and COM-002-3

Project 2007-02 Operating Personnel Communication Protocols Standard Drafting Team
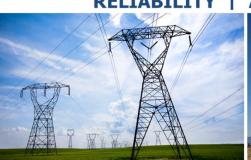
Project 2006-06 Reliability Coordination Standard Drafting Team

June 7, 2012

**RELIABILITY | ACCOUNTABILITY**

**Welcome, Introductions and Administrative – Joseph Krisiak, NERC**

**Opening Remarks – Lloyd Snyder, GSOC, OPCPSDT Chair**

**COM-003-1 Overview, Highlights of Draft 2 Changes – Lloyd Snyder**

**COM-002-3 Overview of Draft 6 – Mike Hardy, Southern Company, RCSDT Chair**

**COM-002-3 and COM 003-1: Past and Present – Lloyd Snyder**

**COM-002-3 and COM 003-1: Schedule – Joseph Krisiak**

**Comment and Ballot Process – Joseph Krisiak**

**Questions and Answers – Moderated by Joseph Krisiak**

- Today's important takeaways!
  - Clarify the scope and intent of each standard
  - Demonstrate the merit of each standard
  - Clarify how each standard will apply communication protocols and address reliability under different operating conditions
  - Discuss the need to have both standards approved in order to preclude a potential reliability gap

COM-003-1 Overview

- The 2003 Blackout Report
  - "Ineffective communications contributed to a lack of situational awareness and precluded effective actions to prevent the cascade. Consistent application of effective communications protocols, particularly during alerts and emergencies, is essential to reliability."

  - The report also recommended that industry: "Tighten communications protocols, especially for communications during alerts and emergencies."

- ## FERC Order 693, P532

  - Directs the ERO and the industry to develop communication protocols based on the following guidelines:

    - "532. While we agree with EEI that EOP-001-0, Requirement R4.1 requires communications protocols to be used during emergencies, we believe, and the ERO agrees, that the communications protocols need to be tightened to ensure Reliable Operation of the Bulk-Power System. We also believe an integral component in tightening the protocols is to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions. This is important because the Bulk- Power System is so tightly interconnected that System impacts often cross several operating entities' areas."

- The 2007 COM-003-1 Standard Authorization Request
  - This Standard Authorization Request requires the development of communications protocols for use by real-time system operators "during normal and emergency operations to improve situational awareness and shorten response time."

- One of the eight high priority issues identified in the NERC President's Top Priority Issues for Bulk Power System Reliability Issued January 7, 2011: [1]

  - Ambiguous or incomplete voice communications – Out of longstanding tradition, system operators and reliability coordinators are comfortable with informal communications with field and power plant personnel and neighboring systems.

  - Experience from analyzing various events indicates there is often a sense of awkwardness when personnel transition from conversational discussion to issuing reliability instructions. It is also human nature to be uncomfortable in applying formal communication procedures after personnel have developed informal styles over many years.

[1] http://www.nerc.com/fileUploads/File/News/NERC%20President%20Top%20Priority%20BPS%20Reliability%20Issues%201-7-11.pdf

- Confusion in making the transition from normal conversation to formal communications can introduce misunderstandings and possibly even incorrect actions or assumptions. Further, once the need to transition to more formal structure is recognized, the transition is often not complete or effective.

- Results can include unclear instructions, confusion whether an instruction is a suggestion or a directive, whether specific action is required or a set of alternative actions are permissible, and confusion over what elements of the system are being addressed.

# COM-003-1 Highlights of Draft 2 Changes

**Removed Communication Protocol Operating Procedure (CPOP) Requirement**

**Removed Alert Level Guide**

**Changed CST Time Zone Requirement**

**Removed definitions of Communication Protocol, Three-Part Communication and Interoperability Communications**

**Changed "NATO alphabet only" requirement**

**Removed mutual agreement requirement for naming adjacent equipment**

**Separation of requirement for three-part communication into two separate requirements**

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Definition of Operating Communications that target the risks to reliability

Improved Time Zone and Time references

Acceptance of other accurate phonetic clarifiers in addition to NATO alphabet

Clarification that references adjacent interface Bulk Electric System (BES) Elements and Facilities will use the name specified by the owner of those interface BES Elements and Facilities

Separation of requirement for three part communication into two separate requirements, one for the issuer and the other for the receiver

Exclusion of Reliability Directives from COM-003-1, Requirements R2 and R3

- All Violation Risk Factors (VRFs) are Medium
- No Binary Violation Severity Levels (VSLs)
- R1 – Medium, High and Severe VSLs
- R2 and R3 – High and Severe VSLs

# COM-002-3 Overview Draft 6

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**Reliability Directive**

**Emergency and Adverse Reliability Impact**

**R1: "Issue"**

**R2: "Repeat"**

**R3: "Confirm"**

COM-002-3 and COM-003-1: History

- Background
  - The two standards were developed by two separate Standard Drafting Teams (SDTs)
    - COM-003-1 (Project 2007-02) by the OPCPSDT
    - COM-002-3 (Project 2006-06) by the RCSDT
  - The original plan was to have COM-003-1 absorb the requirements of COM-002-3 after formal filing approval
  - Both projects moved at different paces and evolved in response to stakeholder comment

- Background (continued)
  - COM-003-1 focused on operating communication protocols as they apply to all operating conditions
  - COM-002-3 focused on operating communication during emergency conditions (i.e., Reliability Directive)
  - Starting in November 2009 efforts were made by both teams to coordinate which requirements would be developed by each SDT
  - Both SDTs had justifiably strong convictions and responded to stakeholder comment differently, resulting in the two current complementary drafts

# COM-002-3 and COM-003-1: The Present

- Current status
  - COM-003-1, Draft 2 is undergoing a 40-day Initial Comment period and 10-day Initial Ballot both ending June 20, 2012
  - COM-002-3, Draft 6 successfully balloted and the next step will be a Recirculation Ballot
- Potential confusion
  - Both SDTs recognize the potential for stakeholder confusion and surprise based on industry's expectation of how these two standards were to be developed and implemented and how they would function in concert to enhance reliability

- Key attributes of each standard
  - COM-003-1
    - Applies to normal operating conditions
    - Features Medium VRFs and gradated VSLs
  - COM-002-3
    - Applies to potential and actual Emergency operating conditions
    - Features High VRFs and binary VSLs

- Coverage
  - Application of COM-003-1, R2 and R3 establishes BES communication protocols under normal operating conditions
  - Application of COM-003-1, R2 and R3 ceases when actions are to be executed as a "Reliability Directive" in accordance with COM-002-3, under Emergency operating conditions
  - Application of COM-003-1, R2 and R3 is reestablished when normal operating conditions return to the BES
  - The two standards together cover "Operating Communications" for all operating conditions

- Coverage (continued)
  - The two standards appropriately differentiate on risk and severity levels based on the operating conditions on the BES
  - Logically, a compromised BES demands that corrective actions such as Reliability Directives be issued, repeated and confirmed accurately to reduce the risk of further degradation to an already compromised system
  - Conversely, Operating Communication errors during normal conditions can be a catalyst for actions that would or could undermine the reliability of the BES

| *Operating Communications* | |
| --- | --- |
| **Communication of instruction to change or maintain the state, status, output, or input of an Element or Facility of the Bulk Electric System.** | |
| *English, 24-hour clock, time-zone, owner's identifier, and alpha-numeric identifiers* | |
| *COM-003-1* | *COM-002-3* |
| **Normal Communication** | **Reliability Directives** |
| **3-Part** | **3-Part** |

- Operating condition transition
  - The transition from normal to Emergency is not always quickly discerned and the use of the same protocols before, during and after an Emergency would eliminate confusion in making the transition from normal conversation to formal communications
  - The premise is if you use three-part communication effectively during routine conditions it will flow naturally into Emergency operations

- Today's important takeaways!
  - Clarify the scope and intent of each standard
  - Demonstrate the merit of each standard
  - Clarify how each standard will apply communication protocols and address reliability under different operating conditions
  - Discuss the need to have both standards approved in order to preclude a potential reliability gap

# COM-003 -1 and COM-002-3: Schedule

- ## COM-003-1

  - First Ballot of Standards – June 2012

  - Successive Ballot of Standards – September 2012

  - Recirculation Ballot of Standards – October 2012

  - Present Standard to the Board of Trustees – November 2012

- ## COM-002-3

  - First Ballot of Standards – Complete

  - Successive Ballot of Standards – Not required

  - Recirculation Ballot of Standards – June 27 to July 6, 2012

  - Present Standard to the Board of Trustees – August 2012
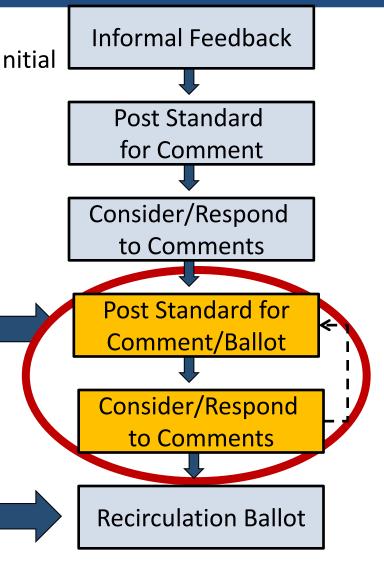
# COM-003-1 Comment and Ballot Process

Posted for 40-day Formal Comment and 10-day Initial Ballot period

**New/Successive Ballot:**
At this step, the standard is either "new" or significantly changed from the last version posted for comment/ballot. The ballot record starts with no votes and no comments.

**Recirculation Ballot:**
At this step, there have been no significant changes to the standard from the last ballot. The ballot record starts with all votes and comments from the previous ballot.

Informal Feedback

Post Standard
for Comment

Consider/Respond
to Comments

Post Standard for
Comment/Ballot

Consider/Respond
to Comments

Recirculation Ballot

- May 7, 2012 through June 20 , 2012
    - Formal 40-day comment period

- June 11, 2012 through June 20, 2012
    - Initial Ballot and Non Binding Poll open
        - Definition
        - Implementation Plan
        - VSLs and VRFs

- Stakeholder feedback is essential

- Almost 360 pages of comments and responses

- Very comprehensive comments from last posting

- Drafting team considered all viewpoints

- Ballot comments
  - Submit through "checkbox form" – not within ballot
  - No need to submit same comment more than once

- Comments on proposed standards
  - Submit through electronic form
  - Be brief
  - Focus on question asked
  - Indicating agreement with others is preferred over copying the comments (e.g., "ABC agrees with XYZ's comments…" or "ABC agrees with XYZ's comments except for…")

- Unofficial comment form
  - Provided to assist comment development
  - Formatting will not transfer from unofficial form to official form (web-based)
- Warning included on comment form:

**VERY IMPORTANT:**
Please note that **the official comment form *does not* retain formatting** (even if it appears to transfer formatting when you copy from the unofficial Word version of the form into the official electronic comment form). If you enter extra carriage returns, bullets, automated numbering, symbols, bolding, italics, or any other formatting, that formatting will not be retained when you submit your comments. Therefore, if you would like to separate portions of your comment by idea, e.g., the drafting team requests that each distinct idea in the same comment block be prefaced with (1), (2), etc., instead of using formatting such as extra carriage returns, bullets, automated numbering, bolding, or italics.

**1. The SDT modified the requirement for use of the R1 Part 1.2 NATO phonetic alphabet to allow use of another correct alpha numeric clarifier. Do you agree with this modification?**

❑ *Yes*
❑ *No*

**2. The SDT modified the requirement R1 Part 1.1.4 for use of identifiers for interface Elements/Facilities only. The identifiers will be assigned by the transmission owner of the Elements/Facilities. Do you agree with this modification?**

❑ *Yes*
❑ *No*

**3. Do you agree with the VRFs and VSLs for Requirements R1, R2and R3?**

❑ *Yes*
❑ *No*

**4. Do you have any other comments or suggestions to improve the draft standard?**

❑ *Comments:*

- Issues and responses for each individual requirement

- Effective feedback:
    - Specific to question
    - Provide proposed change/rationale

- Less effective feedback:
    - Repeating comment multiple times/responses to entire standard in every question
    - No reference to where suggested change should occur
    - Non-specific concerns, e.g. "I do not like this standard."

# Questions?

- Please submit your questions via the ReadyTalk chat window  (please reference slide number)

- Moderator and point of contact – Joseph Krisiak, NERC
  - Joseph.krisiak@nerc.net

- Key dates:
  - May 7, 2012 through June 20, 2012 – Formal Comment Period
  - June 11, 2012 through June 20, 2012 – Ballots Open

- Slides and recording of this webinar will be posted to the NERC website (usually within two business days)